Council on Crime and Justice

RESEARCH DEMONSTRATION ADVOCACY

Minneapolis Police Traffic Stops and Driver's Race

Analysis and Recommendations

A Report to the Minneapolis Police Department

April 13, 2001

Background

In May 2000 the Minneapolis Police Department voluntarily began collecting the race of drivers in traffic stops. The initial data collection continued through October 2000, the end of the pilot period.[1] The purpose was to determine whether police are more likely to stop drivers if they are Persons of Color.

Chief Olson asked the Council on Crime and Justice to conduct an independent analysis of the data collected during the pilot period. The Council is a private, non-profit organization that addresses the causes and consequences of crime and violence through research, demonstration, and advocacy. Completion of this report was delayed until the release of the 2000 Census Redistricting data.

Description of the Data

Over the six-month period from May 1, 2000 to October 31, 2000 officers made a total of 32,323 motor vehicle stops. Included in this number are 29,862 stops recorded with sufficient information to geo-code the location of the stop. In addition to the location of the stop, the driver's race or ethnicity and the disposition of the stop were recorded.

For 28,170 traffic stops the driver's race or ethnicity was identified. Six race/ethnicity categories were used: White, Black, Hispanic, Asian, Native American, and Other. Driver's race/ethnicity was categorized and recorded based on the officer's perception. Less than one-half (43%) of the stops involved white drivers. Stops involving Black drivers totaled 10,470 or 37%, Hispanic drivers were at the wheel in 2309 (8%) stops, Asian drivers totaled 781 or 3% and in 450 (2%) of the stops the driver was Native American. The remaining 7 percent (N=2071) of drivers in traffic-stops were persons of other races.

In addition to the location of the traffic stop and the driver's race/ethnicity, the disposition, or how the stop was cleared, was noted. Officers inform the dispatcher of how a traffic-stop is cleared using one of the following codes:

       ADV – Advise the driver
       TAG – Issue a citation
       BKG – Arrest and book
       AST – Assist another officer
       TRN – Transport either the driver or a passenger
       TOW – Tow the vehicle
       RPT – Write a police report
       SNT – Require driver/passenger to leave the scene

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[1] On February 5, 2001 the Police Department resumed collection of additional data on traffic stops.

Overall in 45% of traffic stops the officer advised the driver, e.g. to repair a broken taillight. Officers issued citations in 44% of the stops and in 10% of the stops the driver was arrested and booked in jail. In some instances an officer may be pre-empted and leave the stopped vehicle or they may clear the traffic stop by reporting that the situation is a.o.k. These dispositions are relatively uncommon and are not reported in the results of the analysis.

Data for the same time period (May to October 2000) were obtained from the Minneapolis Police Department's Computer Assisted Dispatch (CAD) system. Current (2000) population data from the U.S. Bureau of the Census were obtained from the City of Minneapolis Planning Department.

Data from the Computer Assisted Dispatch (CAD) system includes calls for service and officer-generated instances, some of which are traffic-stops. A total of 212,663 events occurred citywide during the period May to October 2000. These events reflect the amount of police activity, citywide and by neighborhood. There is great variation in the CAD numbers across neighborhoods. The neighborhood with the greatest number of CAD events was Phillips with 23,533 events. This number represents just over 11% of the CAD events for the entire city, the population living in Phillips neighborhood represents 5.2% of the city's total population. The neighborhood with the next highest number of CAD events was Downtown West with 14,287 or 6.7% of events citywide. Of the 84 neighborhoods in Minneapolis, 56 had 1.0% or less of the total CAD events for the city.

Data on the City of Minneapolis resident population from the U.S. Bureau of the Census were obtained from the City's Planning Department.[2] In 2000, the population of Minneapolis was 382,618. The racial composition of the population was 65.1% white alone, 18% Black or African American alone, 2.2% American Indian alone, 6.2% Asian alone, 4.1% Some Other Race alone, and 4.4% two or more races. Respondents who selected more than one of the six race groups are included in the "Two or more races" category. Data on persons of Hispanic or Latino origin, who may be of any race, were obtained from a separate question on ethnicity. Persons whose ethnicity is Hispanic/Latino represent 7.6% of the population. The racial composition of neighborhoods fluctuated widely, and although most of the neighborhoods were predominantly white, in 23 neighborhoods 20% or more of the population was African American.

Findings and Analysis

Two questions can be examined with the data collected to date:

    1) Are persons of color stopped more often by police than whites?

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[2] The 2000 Census data, at the time of its release in late March, had not been reviewed for accuracy or completeness by the City of Minneapolis.

2) Are more persons of color issued a citation or arrested as a result of a traffic stop than whites?

Question #1: Are Persons of Color stopped more often than whites?

Between May and October 2000, Persons of Color were stopped more often than whites. Blacks, Hispanics, Native Americans and Asians combined represented 57% of drivers stopped. Whites represented 43% of drivers stopped, but just under two-thirds (65.1%) of the 2000 resident population. African Americans accounted for 37% of traffic stops citywide, compared to 18% of the population in 2000. Traffic stops of Hispanics and American Indians were approximately equal to their representation in the population. Hispanics accounted for 8% of traffic stops and 7.6% of the 2000 population. American Indians made up 2% of traffic stops and 2.2% of the population. Traffic stops of Asians fell below their population percentage. Asians represented 3% of traffic stops and 6.2% of the population in 2000.

Given the limitations of the data (described more fully below) we cannot determine the exact cause of the overrepresentation of African Americans in traffic stops. The racial difference may be the result of police action that relies in some way on the race of the individual rather than on an individual's behavior – racial profiling. Although racial profiling is one of the possible explanations, the racial disparity in traffic stops could also be explained by other factors such as differences in driver behavior or vehicle condition. The data needed to determine whether these differences exist are not available.

Another possible explanation of the racial disparity in traffic stops between African Americans and whites is the geographic concentration of policing activity. CAD events are an indicator of police activity, including responses to calls for service, and actions that are initiated by officers in the field. If police activity is concentrated in a relatively small number of neighborhoods, and if these neighborhoods also have relatively large minority populations, then the chances of being stopped for a traffic violation would be higher in these neighborhoods than in less heavily policed neighborhoods.

There are some data to support this explanation. Of the 182,801 CAD events from May to October 2000, excluding officer-initiated traffic stops, 50% were concentrated in 12 neighborhoods. Five of these neighborhoods were home to a quarter (25.7%) of the African Americans living in the City of Minneapolis in 2000 and slightly under one-third (31.6%) of the CAD events, excluding traffic stops. Approximately 4 of every 10 (39.5%) traffic-stops in which the driver was Black occurred in these five neighborhoods. The remainder (60%) of the Blacks stopped were disbursed among 74 neighborhoods, 11 of these neighborhoods each accounted for 2% – 5% of Blacks stopped and the other 63 neighborhoods each accounted for less than 2% of Blacks stopped.

Table 1. Five Neighborhoods Accounting for 40% of Blacks Stopped

	Percent of Citywide CAD Events*	Percent of Citywide Traffic Stops	Percent of Citywide Total Population	Percent of Citywide Black Population	Percent of Total Blacks Stopped
Phillips	11.3%	9.8%	5.2%	8.5%	11.7%
Downtown West	6.7%	7.0%	1.2%	1.5%	6.1%
Whittier	4.7%	6.7%	4.0%	4.4%	5.6%
Jordan	4.5%	4.2%	2.4%	6.6%	8.0%
Hawthorne	4.4%	4.7%	1.7%	4.7%	8.1%
Total	**31.6%**	**32.3%**	**14.4%**	**25.7%**	**39.5%**

* excluding traffic-stops

In this analysis police activity is measured by the number of CAD events, excluding officer-initiated traffic stops. The other officer-initiated actions represent an unknown proportion of CAD events. Included among the other officer-initiated actions are narcotics and robbery arrests made by police working undercover. Although it would be preferable to separate all officer-initiated actions, not just traffic stops, from calls for service, counts of each type of CAD event are not available.

It appears that traffic stops of African American drivers are concentrated in a relatively small number of neighborhoods. Is the large proportion of African Americans stopped in these neighborhoods a result of higher levels of policing in general, or the result of officers in these neighborhoods conducting more traffic stops than officers patrolling other neighborhoods? It appears that traffic stops are not as large a proportion of police activity – responding to calls for service, initiating traffic stops or other police action – in these neighborhoods as compared to others. Traffic stops as a proportion of CAD events citywide ranged from a low of 3.2% to a high of 30.3%, for the five neighborhoods in Table 1., traffic stops fell in the middle of this range. Among these five neighborhoods, traffic stops were the lowest percentage of police activity in Phillips (12.4%); in Whittier traffic stops were the highest percentage of police activity (18.9%). This suggests that the observed concentration of traffic stops of African Americans may be due to higher levels of policing, but not to police conducting traffic stops out of proportion to their other activities.

Further analysis is needed before concluding that the observed concentration of police activity is responsible for African Americans being stopped more often than whites. The

concentration of police activity may not explain why traffic stops of African Americans are disproportionally higher than their representation in the population. The five neighborhoods that accounted for 40% of all African Americans stopped are among the neighborhoods where the percentage of African Americans stopped was higher than the population percentage. (See Table 2.)

Table 2. Disparities Within Selected Neighborhoods

	Stops with Race Identified	Black Drivers Stopped	Percent of Black Drivers Stopped	Black/African American Population Percentage
Phillips	2726	1226	45.0%	29.4%
Downtown West	1949	634	32.5%	22.9%
Whittier	1905	591	31.0%	20.0%
Jordan	1132	836	73.9%	49.5%
Hawthorne	1277	843	66.0%	50.8%

Question #2: Are more persons of color issued a citation or arrested as a result of a traffic stop than whites?

The distribution of stop dispositions shows that overall in 44.9% of traffic stops the officer advised the driver, a smaller percentage (43%) of drivers received a ticket, and 9.5% were arrested and booked in jail. The table below shows the percentages of dispositions by driver's race.

Table 3. Traffic-stop Disposition by Driver's Race

	White	Black	Hispanic	Asian	Native American
Advised	48.6% N = 5875	41.4% N = 4332	40.5% N = 935	50.7% N = 396	46.9% N = 211
Arrested/Booked	5.6% N = 672	13.9% N = 1456	13.2% N = 305	5.9% N = 46	16.0% N = 72
Ticketed	44.9% N = 5424	42.6% N = 4463	44.0% N = 1016	42.1% N = 329	34.7% N = 156
Total	100% N = 12089	100% N = 10470	100% N = 2309	100% N = 781	100% N = 450

Data on the disposition of traffic stops show that Native Americans were least likely to be ticketed as a result of a traffic stop, 34.7% of Native Americans were issued tickets compared to nearly 43% of Blacks, and 44% of Hispanics. Nearly 45% of whites were issued tickets. Approximately the same range of differences is observed in the percentage of stopped drivers who were advised. Asians were most likely to be advised (50.7%) followed by whites (48.6%), Native Americans (46.9%), and Blacks (41.4%). Slightly more than 40% of Hispanics were advised. The greatest difference is observed in the percentage of persons arrested and booked in jail. Higher percentages of Native Americans, Blacks and Hispanics were arrested and booked than whites or Asians. Although the percentage of stops resulting in arrest was the highest for Native Americans (16.0%) their total stops (N=450) was the lowest for all races. Blacks and Hispanics had nearly equal percentages of arrests, 13.9% and 13.2% respectively. These percentages hide the difference in the actual number of arrests, which were much higher for Blacks (N=1456) than Hispanics (N=305). This is because Hispanics represented a much smaller proportion (8.2%) of the total stops than Blacks (37%).

While Blacks, Native Americans, and Hispanics are arrested and booked more often than whites and Asians, it is difficult to interpret this finding. Does the greater likelihood of arrest reflect harsher treatment of some minorities by police or does it suggest that when minorities are stopped and searched, police are more likely to find drugs or other contraband? Factors other than the race of the driver that affect the likelihood of arrest include the reason for the stop, outstanding arrest warrants, prior driving violations or contraband found during a search of the person or vehicle.

Limitations of the Data

The information collected thus far can be used to determine whether racial minorities are stopped more often than whites. The data collected show that Persons of Color are overrepresented in traffic stops in comparison to their distribution in the resident population. Persons of Color represent 57% of traffic-stops, but only 35% of the resident population. To determine whether the overrepresentation reflects a greater propensity to commit driving violations, data on the racial composition of traffic violators would ideally be used as a benchmark for comparison. The next best estimate for use as a comparison benchmark is the racial distribution of the driving population, specifically estimates of the race of drivers traveling on the streets and roads where the stops are conducted. A proxy for the racial composition of the driving population, such as the distribution of registered car owners by race, could also be used in determining a stop rate. None of these data were available for this analysis.

The only data currently available as a benchmark is the racial composition of the neighborhoods in which the stops were made. The 2000 U.S. Census has the most current data on the resident population. The use of the 2000 Census data has introduced some new problems. For the first time, census respondents could identify themselves as more than one race. There are more than 50 possible combinations of the six race groups. In Minneapolis, 4.4% of the population reported belonging to 2 or more racial groups,

this figure is higher than the percentage of American Indians (2.2%). The Census Bureau included the "Some Other Race" category for responses that did not fit any of the race categories listed. According to the U.S. Census Bureau, the vast majority of respondents who reported "Some Other Race" were Hispanic or Latino. The percentage reporting "Some Other Race" (4.1%) in Minneapolis is lower than the percentage of persons who reported Hispanic/Latino on the ethnicity question (7.6%).

The Census Redistricting data poses another problem since the population count represents the entire resident population. Persons of all ages are included, not just persons of legal driving age (at least 16 yrs old). Detailed data on age and race demographics from the 2000 Census will not be available until summer 2001. At that time a comparison of drivers stopped to persons of legal driving age, both by race, should be made. Professor David A. Harris in his study of racial profiling in Ohio used the driving population[3] as a baseline and also factored in an estimate of car ownership by race[4]. In Harris' study the adjustment for car ownership increased the overrepresentation of minorities in traffic stops.

Another approach to examine whether traffic stops involve racial profiling, one that is not dependent on estimating the driving or violating population, is to compare the disposition of police stops with the reason for the stop. Differences in the percentage of drivers ticketed or arrested across racial groups may be accounted for, at least in part, by the reason for the stop. Information on whether a search was conducted and the result of the search is also needed to understand whether differences across racial groups are evidence of harsher treatment. However, since the reason for the stop and whether a search was conducted were not included in the pilot data collection, this analysis cannot be done.

Recommendations for the Future

Additional Data Collection

Across the nation local law enforcement and state highway patrol agencies have begun or are planning data collection efforts to address the issue of racial profiling. The information collected and how it is collected varies somewhat across participating agencies. There is some disagreement among researchers who study racial profiling over whether data collection efforts should include for example, whether a search was conducted of the passenger(s); whether the driver was asked to exit the car; and the duration of the stop. Collection of these items would be in addition to the data elements more typically recorded: reason for stop; driver's age; whether a search was conducted of the driver; the authority for the search; and the result of the search.

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[3] Driving population was calculated from the 1990 U.S. Census Bureau data on the race and age of the population. It includes persons ranging in age from 15 to 75 years old.
[4] The estimate of automobile ownership by race was based on data from the National Personal Transportation Survey, a survey conducted by the Federal Highway Administration of the U.S. Department of Transportation.

Beginning February 5, 2001 Minneapolis Police officers began recording the reason for the stop, making a distinction between stops for moving violations, equipment infractions, and other reasons. In addition, police officers are required to indicate if the driver was frisked, or patted down, and to indicate under what authority a search of the vehicle was conducted. Four codes are used to record the authority for a search – consensual, probable cause, searches incident to arrest, and searches of inventory prior to towing. Officers need to report this information only if a vehicle is searched.

There are two areas in which further improvements to the data are needed: 1) adding data elements on traffic stops and 2) benchmarking the driving population. The following recommendations focus on the need for additional data on traffic stops.

1. The disposition codes should indicate whether, in the case of a citation, the citation was for criminal conduct or for a traffic violation. This is an important distinction when comparing the issuance of a citation across racial groups.

2. A distinction should also be made in the type of arrest, specifically whether or not it was a warrant arrest. This additional information is important given police officers' limited discretion in cases where the stopped driver has an outstanding arrest warrant.

3. In the case of an arrest, the primary offense should also be noted. The primary offense may not correspond to the reason for the stop; in particular, arrests for drugs or other contraband may result from a search of the driver or vehicle following a traffic stop, not from the officer having prior information to suspect illegal activity.

4. We also recommend the collection of the gender and age (or birthdate) of the driver in traffic stops. Findings from other jurisdictions show that age and gender are associated with differences by race in traffic stops.

5. It would be desirable to record the results of the search – whether contraband was found and/or property was seized. This additional information would address the perception that police use searches to harass minority drivers by examining whether Persons of Color are less likely to be arrested following a search than whites.

Improved Data Collection Protocol

Given the recent influx of immigrants from Somalia and other African countries, the racial/ethnic categories should include African. Expanding the categories will allow for a more accurate racial classification. We appreciate the difficulty of making a distinction, for example, between African Americans and Africans, given that the determination of a driver's race/ethnicity is based on the officer's perception.

More Detailed Analysis

We recommend that future analyses begin by comparing the disposition, or outcome, of the stop to the reason for the stop. Differences in the percentages of drivers ticketed or arrested across racial groups may be accounted for, at least in part, by the reason for the stop. For example, if police issue citations more often for moving violations than equipment failure, and a higher percentage of white drivers were stopped for speeding, then more white drivers would be issued citations.

Location information for the traffic stops included in the present analysis was sufficiently detailed to identify the neighborhoods in which the stops occurred. The next step is to identify within neighborhoods the streets and intersections where the stops occurred, which will be possible since the revised data collection protocol requires officers to provide the street address of the stop. At this level of detail the analysis could compare the race of drivers stopped on major thoroughfares to drivers stopped on residential streets. The resident population from the U.S. Census Bureau, adjusted for legal driving age, could be used as a baseline in an analysis of stops occurring on residential streets.

We also recommend an analysis of the number of calls for service, police officers and traffic stops per capita for each of the twelve sectors identified by the Minneapolis Police Department (3 police precincts, including the Downtown Command, with 2 sectors each, plus 2 precincts with 3 sectors each). Variations by sector in the number of calls for service per capita may explain differences in the deployment of police officers. A disproportionate allocation of police resources in residential areas more heavily populated by racial minorities may explain, at least in part, some of the racial disparity in the stopping rates.

Calculating the "hit rate" – the frequency that stops and searches yield the discovery of drugs or other contraband – and comparing the hit rate across racial groups will provide additional insight on the effectiveness of the stop and search strategy. The result of the search is not one of the new data elements that are now being collected on traffic stops. The stop disposition, which is recorded for all stops including those involving searches, indicates whether the officer made an arrest. With this data it will be possible to compare the percentage of vehicles searched by driver's race, and for those that were searched, the hit rates (as measured by arrest) for different racial groups. If hit rates are the same across racial groups, but the frequency of searches are higher for one or more racial group(s), then further analysis is needed to understand why some drivers have their vehicles searched more often.

Conclusion

The Minneapolis Police Department is commended for voluntarily collecting data on traffic stops and, since February 2001, for expanding the information collected. Given the concerns raised about racial profiling, ongoing data collection and analysis is an important step toward addressing these concerns.

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